



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>E21B 17/05, 4/00, 10/62</b>		A2	(11) International Publication Number: <b>WO 95/21317</b>
			(43) International Publication Date: <b>10 August 1995 (10.08.95)</b>
(21) International Application Number: <b>PCT/GB95/00181</b>		(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ).	
(22) International Filing Date: <b>30 January 1995 (30.01.95)</b>			
(30) Priority Data: <b>9402216.7 4 February 1994 (04.02.94) GB</b>			
(71) Applicant (for all designated States except US): DB STRATABIT S.A. [BE/BE]; 74, avenue du Pont-de-Luttre, B-1190 Brussels (BE).		Published <i>Without international search report and to be republished upon receipt of that report.</i>	
(72) Inventors; and (75) Inventors/Applicants (for US only): DEFOURNY, Paul, Marie, Joseph, Louis, Vincent, Ghislain [BE/BE]; 50, rue Bois-du-Breucq, B-7110 La Louviere (BE). ABBASSIAN, Fereidoun [GB/GB]; Flat 2, 126 Goldhurst Terrace, London NW6 3HR (GB).			
(74) Agent: BEN-NATHAN, Laurence, Albert; Urquhart-Dykes & Lord, 91 Wimpole Street, London W1M 8AH (GB).			

## (54) Title: DRILLING BIT ASSEMBLY AND APPARATUS

## (57) Abstract

A drill bit comprises a shank member (31), a bit body (32) provided with cutters (33) and flexible material (35) between the shank (31) and the bit body (32) allowing relative tilting movement therebetween to reduce adverse effects caused by vibration of the bit. In other embodiments, flexible material is provided between the bit body and the cutters. In further embodiments, the flexible material may be provided in a tiltable sub-assembly for incorporation in a drill-string above the drill bit. An apparatus for simulating drilling conditions is also provided.

